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| APPLICATION NO. | FILING DATE                       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-----------------------------------|----------------------|---------------------|------------------|
| 10/676,251      | 10/02/2003                        | Hironori Endo        | Q77505              | 3461             |
| 23373 7         | 7590 09/06/2005                   |                      | EXAMINER            |                  |
|                 | MION, PLLC<br>YLVANIA AVENUE, N.W | V.                   | FIDLER, SHELBY LEE  |                  |
| SUITE 800       | <b>,</b>                          |                      | ART UNIT            | PAPER NUMBER     |
| WASHINGTO       | N, DC 20037                       |                      | 2861                |                  |

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |   |                                       | H'H     |  |  |  |  |
|---|---|---------------------------------------|---------|--|--|--|--|
| •   | Application No.   | Applicant(s)                          |         |  |  |  |  |
| Office Action Summans   | 10/676,251  | Endo, Hironori                        |         |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit                              |         |  |  |  |  |
|   | Shelby Fidler   | 2861                                  |         |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply   |   |                                       |         |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                                       |         |  |  |  |  |
| Status .  |   |                                       |         |  |  |  |  |
| 1) Responsive to communication(s) filed on  |   |                                       |         |  |  |  |  |
|   | his action is non-final.  |                                       |         |  |  |  |  |
| 3) Since this application is in condition for allow   |   | tters, prosecution as to the mer      | rits is |  |  |  |  |
| ,   | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. |                                       |         |  |  |  |  |
| Disposition of Claims   |   |                                       |         |  |  |  |  |
| 4) Claim(s) 1-19 is/are pending in the applicati  | on.   |                                       |         |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |                                       |         |  |  |  |  |
| 5) Claim(s) is/are allowed.   |   |                                       |         |  |  |  |  |
| 6)⊠ Claim(s) <u>1-19</u> is/are rejected.   |   |                                       |         |  |  |  |  |
| 7) Claim(s) is/are objected to.   |   |                                       |         |  |  |  |  |
| 8) Claim(s) are subject to restriction and  | d/or election requirement.  | •                                     |         |  |  |  |  |
| Application Papers  |   |                                       |         |  |  |  |  |
| 9) The specification is objected to by the Exam   | iner.   |                                       |         |  |  |  |  |
| 10)⊠ The drawing(s) filed on 10/02/2003 is/are: a)⊠ accepted or b)□ objected to by the Examiner.  |   |                                       |         |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |                                       |         |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |   |                                       |         |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |                                       |         |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |                                       |         |  |  |  |  |
|   | ian priority under 35 U.S.C.  | 8 119(a)-(d) or (f)                   |         |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of: 1.⊠ Certified copies of the priority documents have been received.   |   |                                       |         |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |   |                                       |         |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |   |                                       |         |  |  |  |  |
| * *   | application from the International Bureau (PCT Rule 17.2(a)).                                     |                                       |         |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |   |                                       |         |  |  |  |  |
| Attachment(s)   |   |                                       |         |  |  |  |  |
| 1) Notice of References Cited (PTO-892)   | 4) Interview  | Summary (PTO-413)                     | :       |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No  | o(s)/Mail Date                        | :       |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date  | (08) 5) Notice of 6) Other:   | Informal Patent Application (PTO-152) |         |  |  |  |  |

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For example, in Claim 1, lines 3 and 4, the wording, "positioning a sensor in a one edge side in a movement direction of said sensor" is vague in that no orientation information has been recited in the claim in order to understand a movement direction of said sensor. Movement direction could mean random movement from one undefined location relative to another and with no ordered predictability. Also, direction could imply movement among random scattered locations in space. The one edge side could include a jagged side or a curved side as well as any other possible configuration. Further, "carrying said recording medium in a predetermined direction up to a detection position" is unclear in that in the absence of any orientation information the movement direction and the predetermined direction could be the same. Also, the location of, "a detection position" in free space is vague, since no place or location has been established in the claim.

Continuing, in claim 1, line 10, the wording, "after bringing said sensor in a state" is confusing. "Bringing" means leading or causing to go to another place. Since no first place has been defined in the claim, there is no support for, "bringing". Similarly, the wording, "in a state" means a condition or mode of being. However, the claim wording on lines 10 and 11 call for

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"said sensor does not detect said recording medium" references a condition that does not exist,

which goes against the meaning of "state" which covers a positive existence or state of existing.

The conditional language on lines 14 to 29 of claim 1 remain confusing in that the "if"

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statement is inconclusive, since no condition is recited to follow when the "if "condition does not

exist. Also, on line 15, the wording, "leading distance" is vague along with, "movement

distance" on line 25. Distance is the extent of space between two objects or places. In the

absence of any reference object or place information in the claim, no understandable meaning

can be associated with "leading distance". Further, the wording, "upper edge" on line 15 of

claim 1 and "other edge side" on line 16 in addition to "upper right edge" on line 16 and "upper

left edge" on line 17 is vague in the absence of a reference point or location from which up,

down, right, and left may be determined.

On line 20 of claim 1, the wording, "necessary" is considered subjective and adds no

patentable meaning to the claim. On line 21, further reference to, "the state" is vague, since no

definite state exists in the claim and further calling for a negative limitation on lines 21 and 22

where the sensor "does not detect said recording medium.

Similar comments apply to claims 2-19. Clarification and correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5-9, and 13-19 as understood are rejected under 35 U.S.C. 102(b) as being anticipated by Walker (6352332).

With regards to claim 1, Walker teaches a recording method (col. 3, line 52) comprising the steps of:

Positioning a sensor in a one edge side movement direction of said sensor (col. 3, lines 51-58); carrying the medium up to a detection position where the sensor detects the medium (col. 3, lines 59-61); after bringing the sensor in a state in which the sensor does not detect the medium (Since Walker makes rapid recordings of reflectance, the sensor must cycle through the state in which the sensor does not detect the medium, col. 7, lines 1-3), moving the sensor toward another edge side opposite to said one edge side until the sensor detects the medium (col. 6, lines 55-56); and obtaining a leading distance by which an upper edge leads another upper edge (col. 8, lines 10-13) based on a carrying distance of the medium and a movement distance of the sensor (col. 4, lines 25-28).

With regards to claim 5, Walker teaches obtaining a skew angle based on the carrying distance of the medium and the movement distance of the sensor ("measurement of print medium skew" is read as "skew angle," col. 4, lines 25-28).

With regards to claim 9, Walker teaches dividing a movement direction of a sensor into a plurality of sectors (col. 6, line 65 – col. 7 line 2 or col. 5, lines 56-60).

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With regards to claims 6 and 13, Walker teaches a sensor moving in a movement direction together with a recording head (col. 3, lines 10-11).

With regards to claims 7 and 14, Walker teaches a sensor comprising a light-emitting member (col. 6, lines 31-32) and a light-receiving member (col. 6, lines 34-35), and detects medium based on an output value of the light-receiving member (col. 6, lines 61-62).

With regards to claims 8 and 15, Walker teaches the recording head carrying out recording with respect to an entire surface of the recording medium (col. 3, line 31-32).

With regards to claim 16, Walker teaches a movable sensor (col. 3, line, 31-32); a carrying mechanism for carrying the medium in a direction intersecting a movement of the sensor (col. 5, lines 49-52).

With regards to claim 17, refer to similar arguments as from claims 1, 9, and 16.

With regards to claims 18 and 19, Walker teaches using programs to execute imaging, printing, print media handling, control functions, and logic with firmware or software (col. 5, lines 42-45). Therefore, refer to similar arguments as from claims 1 and 9.

## Specification

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which fail to clearly define the invention. For example, large sections of the specification are redundant and fail to clearly describe the invention. The following wording is repeated in multiple sections of the specification:

"A recording method for recording on a recording medium . . .

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positioning a sensor in a one edge side in a movement . . .
       after bringing the sensor in a state . . .
       if the sensor detects the recording medium . . .
       a movement distance of when said sensor moved. . .
       corresponds to the leading distance."
       This text is found on page 2, line 19 – page 3, line 14, and exactly replicated on page 10,
line 25 – page 11, line 20;
       "A recording method for recording on a recording medium . . .
       dividing a movement direction of a sensor . . .
       after bringing the sensor in a state . . .
       if the sensor detects the recording medium . . .
       carrying the recording medium . . .
       corresponds to the leading distance."
       This text is found on page 3, line 17 – page 4, line 7, and exactly replicated on page 15,
line 14 – page 16, line 4;
       "A recording apparatus for recording on a recording medium . . .
       a movable sensor for detecting the recording medium . . .
       the sensor positioned in a one edge side in the movement . . .
       after bringing the sensor in a state . . .
       a movement distance of when the sensor has moved . . .
       corresponds to the leading distance."
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This text is found on page 4, line 10 – page 5, line 9, and exactly replicated on page 18, line 27 – page 19, line 26; and

"A recording apparatus for recording on a recording medium . . .

a movable sensor for detecting the recording medium . . .

the movement direction of the sensor is divided . . .

after bringing the sensor in a state . . .

the carrying mechanism carries the recording medium . . .

corresponds to the leading distance."

This text is found on page 5, line 12 – page 6, line 6, and exactly replicated on page 19, line 27 – page. 20, line 21.

On numerous occasions (such as those cited above) the specification is exceedingly repetitive, making it difficult for the reader to understand the invention.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. A suggested title is "A Method for Determining Skew."

The "Description of the Drawings" is objected to because of the following informalities:

The description for Figures 11A – 11F are redundant. The repeated wording on page 7 (e.g. lines 13-16) should be deleted, and Figures 11A – 11F should identify only one of the repeated sections. Similar correction should be made for the descriptions of Figures 12A – 12F, and 14A – 14F.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SLF

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